CLAIMS

1. Signal processing apparatus (100), *comprising*:

tuning means (10, 15, 20, 25, 30) for generating first and second IF signals;

first AGC means (40) for generating a first AGC signal responsive to said first IF signal;

second AGC means (50) for generating a second AGC signal responsive to said second IF signal;

third AGC *means* (60) *for generating* a third AGC signal responsive to at least one of said first and second IF signals; and

switching means (70) for selectively providing one of said first, second and third AGC signals to said tuning means (10, 15, 20, 25, 30) responsive to a predetermined condition.

2. The signal processing apparatus (100) of claim 1, wherein:
said first IF signal represents an analog channel; and
said first AGC means (40) comprises an analog demodulator.

3. The signal processing apparatus (100) of claim 1, wherein:
said second IF signal represents a digital channel; and
said second AGC means (50) comprises a digital demodulator.

4. The signal processing apparatus (100) of claim 1, wherein said third AGC means (60) comprises a wide band AGC detector.

5. The signal processing apparatus (100) of claim 1, further comprising processing means (90) for outputting a control signal that causes said switching means (70) to provide one of said first, second and third AGC signals.

6. The signal processing apparatus (100) of claim 1, wherein:
said first and second AGC signals are narrow band signals; and
said third AGC signal is a wide band signal.

7. A method (200) for providing an AGC function, comprising:

using a tuner to generate one of first and second IF signals (210);

generating a first AGC signal responsive to said first IF signal (230);

generating a second AGC signal responsive to said second IF signal (270);

generating a third AGC signal responsive to at least one of said first and second IF signals (280); and

using a switch to selectively provide one of said first, second and third AGC signals to said tuner responsive to a predetermined condition.

8. The method (200) of claim 7, wherein said first IF signal represents an analog channel.

9. The method (200) of claim 7, wherein said second IF signal represents a digital channel.

10. The method (200) of claim 7, further comprised of generating a control signal that causes said switch to provide one of said first, second and third AGC signals.

11. The method (200) of claim 7, wherein:

said first and second AGC signals are narrow band signals; and

said third AGC signal is a wide band signal.

12. A television signal receiver (100), comprising:

a tuner (10, 15, 20, 25, 30) operative to generate first and second IF signals;

a first demodulator (40) operative to generate a first AGC signal responsive to said first IF signal;

a second demodulator (50) operative to generate a second AGC signal responsive to said second IF signal;

a wide band AGC detector (60) operative to generate a third AGC signal responsive to at least one of said first and second IF signals; and

a switch (70) operative to selectively provide one of said first, second and third AGC signals to said tuner (10, 15, 20, 25, 30) responsive to a predetermined condition.

13. The television signal receiver (100) of claim 12, wherein:
said first IF signal represents an analog channel; and
said first demodulator (40) comprises an analog demodulator.

14. The television signal receiver (100) of claim 12, wherein:
said second IF signal represents a digital channel; and
said second demodulator (50) comprises a digital demodulator.

15. The television signal receiver (100) of claim 12, further comprising a processor (90) operative to output a control signal that causes said switch (70) to provide one of said first, second and third AGC signals.

16. The television signal receiver (100) of claim 12, wherein:
said first and second AGC signals are narrow band signals; and
said third AGC signal is a wide band signal.